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Intervertebral disc prosthesis of sandwich structure - with
two pref. metal plates and intermediate disc esp. of polyethylene giving
limited pivotal movement

Patent Assignee: BUETTNER-JANZ K (BUET-I); DERR B (DERR-I); HELISCH H
(HELI-I); SCHELLNACK K (SCHE-I); ERKEL K (ERKE-I); SCHUMANN R (SCHU-I);
HUMBOLDT-UNIV BERLIN (UYBE); UNIV BERLIN HUMBOLDT (UYBE)

Inventor: BUETTNER-JANZ K; DERR B; HELISCH H; SCHELLNACK K; ERKEL K;
SCHUMANN R; BUTTNERJAN K; ERKEL K P; HELISCH H J

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Patent Family:

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DE 3529761	A	19860703	DE 3529761	A	19850820	198628
DD 234609	A	19860409			198632	
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Cited Patents: CH 624573; DE 2263842; DE 3023353

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Abstract (Basic): EP 176728 B

A prosthesis for an intervertebral disc comprises two plates (1) with a spacer disc (4) between them. The plates each have a concave centre (1) and flat annular rim (2), pref. upwardly cranked at its edge and carrying spikes (3). The spacer, of suitable depth has a convex centre (4) and a flat rim with annular groove (6).

Prefd. materials are: plates, non-corroding metal; spacer disc medicinal polyethylene. Bioactive ceramics or polyurethanes can also be used. Radiological markers may be used.

USE/ADVANTAGE - As a prosthesis for an intervertebral disc. Remains firmly in place. Permits natural movement of the spine. (20pp

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Abstract (Equivalent): EP 176728 B

Intervertebral disc endoprosthesis comprising two symmetrical end plates having a concave central part and anchoring projections and having a biconvex spacing piece with the same radius of curvature as the concave central part, characterised in that the end plates have a ring-shaped, flat guide edge which is bent at its outer edge and is provided with a tooth system continuously round the edge, and in that the height adjustable spacing piece also has a ring-shaped flat guide edge which fits it and which is surrounded by an annular ring which prevents slipping or sliding out from the end plates. (7pp)

Abstract (Equivalent): US 4759766 A

Intervertebral disc endoprosthesis comprises first and second end plates and a spacing piece. Spacing piece has top and bottom surfaces. First end plate has a first surface adjacent the top surface of the spacing piece. Second end plate has a second surface adjacent the

bottom surface of the spacing piece. Top, bottom, first and second surfaces are each partial surfaces of a cylinder. Top surface and first surface adjacent the top surface are congruent, and form a first cylindrical movement surface. Bottom surface and second surface adjacent the bottom surface are also congruent, and form a second cylindrical movement surface. First and second movement surfaces are rotationally-offset 90 deg. w.r.t. each other about a central axis passing through spacing piece and end plates.

USE - For insertion between base plate and cover plate of 2 adjacent vertebrae. (10pp)(

Title Terms: INTERVERTEBRAL; DISC; PROSTHESIS; SANDWICH; STRUCTURE; TWO; PREFER; METAL; PLATE; INTERMEDIATE; DISC; POLYETHYLENE; LIMIT; PIVOT; MOVEMENT

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